

STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for April, 1894, of the directors of the State Weather Services. The Maryland service includes Delaware and the District of Columbia. The New England service includes the six New England States. The organization of a service for Alaska, under the director of the California State service, is contemplated.

ALABAMA.

Temperature.—The mean was 1.3 above the normal; maximum, 98, at Union, 17th; minimum, 31, at Newburg, 12th.

Precipitation.—The average was 1.64 below the normal; greatest monthly, 6.63, at Cordova; least monthly, 0.48, at Opelika.

Wind.—Prevailing direction, south.—*F. P. Chaffee, Local Forecast Official, Weather Bureau, Montgomery, director.*

ARIZONA.

Temperature.—The mean was 3.0 above the normal; maximum, 99, at Red Rock, 8th, and at Yuma, 25th; minimum, 15, at Whipple Barracks, 18th; greatest monthly range, 70, at Whipple Barracks; least monthly range, 45, at Oracle.

Precipitation.—The average was 0.4 below the normal; greatest monthly, 0.80, at Show Low; least, 0.00, at 21 stations.

Wind.—Prevailing direction, southwest.—*W. R. Burrows, Observer, Weather Bureau, Tucson, director.*

ARKANSAS.

Temperature.—The mean was 0.2 above the normal; maximum, 91, at Forrest, Helena, and Ozark, 16th, and at Corning, 29th; minimum, 30, at Pocahtontas, 1st; greatest monthly range, 59, at Hot Springs; least monthly range, 43, at Washington.

Precipitation.—The average was 1.40 above the normal; greatest monthly, 12.78, at Washington; least, 1.29, at Conway.

Wind.—Prevailing direction, south.—*F. H. Clarke, Local Forecast Official, Weather Bureau, Little Rock, director; G. G. Harkness, Observer, Weather Bureau, assistant.*

CALIFORNIA.

Temperature.—The mean was 1.9 above the normal; maximum, 103, at Salton, 20th; minimum, 15, at Boca, 27th; greatest monthly range, 63, at Pleasanton; least monthly range, 27, at Point Lobos.

Precipitation.—The average was 1.7 below the normal; greatest monthly, 4.41, at Crescent City; least, 0.00, at a number of places.

Wind.—Prevailing direction, west-northwest.—*J. A. Barwick, Observer, Weather Bureau, Sacramento, director.*

COLORADO.

Temperature.—The mean was 1.0 above the normal; maximum, 92, at Cheyenne Wells, 22d; minimum, —5, at Pikes Peak, 9th, and at Breckenridge, 3d; greatest monthly range, 77, at Julesburg; least monthly range, 38, at Pikes Peak.

Precipitation.—The average was 0.60 below the normal; greatest monthly, 4.66, at Breckenridge; least monthly, 0.00, at Delta.

Wind.—Prevailing direction, west.—*G. A. Loveland, Observer, Weather Bureau, Denver, director.*

CONNECTICUT.

Temperature.—The mean was 0.4 above the normal; maximum, 77, at Canton, Middletown, and North Grosvenor Dale, 28th; minimum, 12, at North Grosvenor Dale, 3d; greatest monthly range, 65, at North Grosvenor Dale; least monthly range, 46, at New London.

Precipitation.—The average was 0.70 below the normal; greatest monthly, 4.59, at Colchester; least monthly, 1.82, at Norwalk.

Wind.—Prevailing direction, south.—*J. Warren Smith, Weather Bureau, Boston, Mass., director.*

DELAWARE.

Temperature.—Maximum, 82, at Kirkwood, 28th; minimum, 21, at Newark, 3d; greatest monthly range, 57, at Newark; least monthly range, 50, at Milford.

Precipitation.—Greatest monthly, 4.40, at Milford; least monthly, 3.38, at Newark and Wilmington.—*C. P. Cronk, Observer, Weather Bureau, Baltimore, Md., in charge.*

FLORIDA.

Temperature.—The mean was 1.0 below the normal; maximum, 93, at Kissimmee, 16th, and at Plant City, 17th; minimum, 41, at Orange City, 13th; greatest monthly range, 49, at Orange City; least monthly range, 17, at Key West.

Precipitation.—The average was 1.47 below the normal; greatest monthly, 3.98, at Moseley Hall; least monthly, 0.03, at Key West and Ocala.

Wind.—Prevailing direction, southeast.—*E. R. Demain, Observer, Weather Bureau, Jacksonville, director.*

GEORGIA.

Temperature.—Maximum, 95, at Columbus, 29th, and at Americus, 18th; minimum, 28, at Clayton, 3d; greatest monthly range, 59, at Millen; least monthly range, 42, at Marshallville.

Precipitation.—Greatest monthly, 4.73, at Morgan; least monthly, 0.64, at Savannah.

Wind.—Prevailing directions, west and northwest.—*Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.*

IDAHO.

Temperature.—Maximum, 87, at Payette, 20th; minimum, 6, at Lake, 1st; greatest monthly range, 65, at Payette; least monthly range, 36, at Atlanta Hill.

Precipitation.—Greatest monthly, 3.55, at Garden Valley; least monthly, 0.45, at Kootenai.

Wind.—Prevailing direction, northwest.—*J. H. Smith, Observer, Weather Bureau, Idaho Falls, director.*

ILLINOIS.

Temperature.—The mean was 2.1 above the normal; maximum, 95, at Rushville, 28th; minimum, 23, at Dixon and Decatur, 2d.

Precipitation.—The average was 0.85 below the normal; greatest monthly, 4.70, at Fort Sheridan; least monthly, 1.03, at Streator.

Wind.—Prevailing direction, southeast.—*John Craig, Observer, Weather Bureau, Springfield, director.*

INDIANA.

Temperature.—The mean was 1.0 above the normal; maximum, 94, at Vincennes, 30th; minimum, 23, at Hawpatch, 21st; greatest monthly range, 62, at Vincennes and Rockville; least monthly range, 50, at New Albany.

Precipitation.—The average was 0.81 below the normal; greatest monthly, 7.70, at Marengo; least monthly, 1.08, at Union City.

Wind.—Prevailing direction, southwest.—*Prof. H. A. Huston, Lafayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.*

IOWA WEATHER AND CROP SERVICE.

Temperature.—The mean was 3.0 above the normal; maximum, 98, at Greenfield, 28th; minimum, 12, at Forest City, 6th; greatest monthly range, 74, at Atlantic; least monthly range, 46, at Sac City.

Precipitation.—Greatest monthly, 6.98, at Hampton; least monthly, 0.55, at Seymour.

Wind.—Prevailing direction, southeast.—*J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.*

KENTUCKY.

Temperature.—The mean was 0.2 above the normal; maximum, 94, at Fords Ferry, 29th and 30th; minimum, 23, at Sandy Hook, 3d; greatest monthly range, 64, at Fords Ferry; least monthly range, 46, at Edmonton.

Precipitation.—The average was 0.94 below the normal; greatest monthly, 7.21 at Earlinton; least monthly, 1.56, at Caddo.

Wind.—Prevailing direction, southwest.—*Frank Burke, Local Forecast Official, Weather Bureau, Louisville, director.*

LOUISIANA.

Temperature.—The mean was 0.8 above the normal; maximum, 93, at Schriever, 28th; minimum, 33, at Girard, 1st; greatest monthly range, 56, at Girard; least monthly range, 21, at Port Eads.

Precipitation.—The average was 0.13 below the normal; greatest monthly, 9.55, at Delhi; least monthly, 1.34, at Wallace.

Wind.—Prevailing direction, south.—*R. E. Kerkam, Local Forecast Official, Weather Bureau, New Orleans, director.*

MAINE.

Temperature.—The mean was 0.6 above the normal; maximum, 84, at Farmington, 27th; minimum, 1, at Fort Kent, 3d; greatest monthly range, 73, at Houlton; least monthly range, 48, at Eastport.

Precipitation.—The average was 0.66 below the normal; greatest monthly, 3.12, at Cornish; least monthly, 0.72, at Houlton and Fairfield.

Wind.—Prevailing direction, northeast.—*J. Warren Smith, Weather Bureau, Boston, Mass., director.*

MARYLAND.

Temperature.—The mean was 0.9 below the normal; maximum, 84, at Charlotte Hall, 28th, and at Benedict, 29th; minimum, 9, at Sunnyside, 3d; greatest monthly range, 69, at Sunnyside; least monthly range, 48, at Woodstock, Darlington, and Solomons.

Precipitation.—Greatest monthly, 5.79, at Oakland; least monthly, 1.59, at Cumberland.

Wind.—Prevailing direction, northwest.—*Dr. William B. Clark, Johns Hopkins University, Baltimore, director; C. P. Cronk, Observer, Weather Bureau, in charge.*

MASSACHUSETTS.

Temperature.—The mean was 1.6 above the normal; maximum, 82, at Lowell (c), 27th; minimum, 9, at Ludlow, 8d; greatest monthly range, 70, at Lake Cochituate; least monthly range, 33, at Woods Holl.

Precipitation.—The average was 0.25 below the normal; greatest monthly, 5.51, at Kendall Green; least monthly, 0.80, at Newburyport.

Wind.—Prevailing direction, southwest.—*J. Warren Smith, Weather Bureau, Boston, director.*

MICHIGAN.

Temperature.—The mean was 1.9 above the normal; maximum, 89, at Paris, 30th; minimum, 10, at Grayling and Rockland, 2d; greatest monthly range, 75, at Grayling and Paris; least monthly range, 44, at Alpena and Arhela.

Precipitation.—The average was 0.16 below the normal; greatest monthly, 8.95, at Parkville; least monthly, 0.35, at Charlevoix.

Wind.—Prevailing direction, southwest.—*E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.*

MINNESOTA.

Temperature.—The mean was 4.5 above the normal; maximum, 85, at Bingham Lake, 26th; minimum, 10, at Pokegama Falls, 12th; greatest monthly range, 63, at St. Vincent, Airlie, and Marfield; least monthly range, 46, at Clear Water.

Precipitation.—The average was 2.50 above the normal; greatest monthly, 7.66, at Long Prairie; least monthly, 2.01, at Airlie.

Wind.—Prevailing direction, southeast.—*E. A. Beals, Observer, Weather Bureau, Minneapolis, director.*

MISSISSIPPI.

Temperature.—The mean was 2.7 above the normal; maximum, 98, at Yazoo City, 18th; minimum, 35, at Clarksdale and Waynesboro, 1st, and at French Camps, 2d; greatest monthly range, 60, at Waynesboro; least monthly range, 31, at Bay St. Louis and Moss Point.

Precipitation.—The average was 2.70 below the normal; greatest monthly, 7.21, at Port Gibson; least monthly, 1.79, at Kosciusko.—*R. J. Hyatt, Local Forecast Official, Weather Bureau, Vicksburg, director.*

MISSOURI.

Temperature.—The mean was 0.9 above the normal; maximum, 95, at Harrisonville, 28th; minimum, 22, at Potosi, 6th; greatest monthly range, 67, at Greendale; least monthly range, 39, at Arthur.

Precipitation.—The average was 0.29 below the normal; greatest monthly, 6.84, at Phillipsburg; least monthly, 0.90, at Pickering.

Wind.—Prevailing direction, southeast.—*A. E. Hackett, Observer, Weather Bureau, Columbia, director.*

MONTANA.

Temperature.—The mean was 1.0 above the normal; maximum, 86, at Glendive, 21st; minimum, 4, at Fort Logan, 17th; greatest monthly range, 72, at Glasgow; least monthly range, 44, at Bozeman.

Precipitation.—The average was 0.86 above the normal; greatest monthly, 8.23, at White Sulphur Springs; least monthly, 0.31, at Radersburg.

Wind.—Prevailing direction, northwest.—*J. M. Sherier, Observer, Weather Bureau, Helena, director.*

NEBRASKA.

Temperature.—The mean was 3.1 above the normal; maximum, 98, at Arborville, 28th; minimum, 11, at Fort Sidney, 9th; greatest monthly range, 76, at Weeping Water; least monthly range, 38, at Burwell.

Precipitation.—The average was 0.55 below the normal; greatest monthly, 4.39, at Fort Sidney; least monthly, 0.36, at Indianola.

Wind.—Prevailing direction, northwest.—*George E. Hunt, Local Forecast Official, Weather Bureau, Omaha, director.*

NEVADA.

Temperature.—The mean was 0.9 below the normal; maximum, 90, at Downeyville, 10th; minimum, 10, at Stofiel, 3d; greatest monthly range, 69, at Sunnyside; least monthly range, 43, at Battle Mountain and Toano.

Precipitation.—Greatest monthly, 2.08, at Stofiel; least monthly, 0.00, at Sunnyside.

Wind.—Prevailing direction, southwest.—*Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.*

NEW HAMPSHIRE.

Temperature.—The mean was 2.2 above the normal; maximum, 80, at Nashua, 27th; minimum, 8, at Bethlehem and Stratford, 3d; greatest monthly range, 69, at Bethlehem; least monthly range, 51, at Hanover.

Precipitation.—The average was 0.38 below the normal; greatest monthly, 3.52, at Antrim; least monthly, 0.97, at Alstead.

Wind.—Prevailing direction, north.—*J. Warren Smith, Weather Bureau, Boston, Mass., director.*

NEW JERSEY.

Temperature.—The mean was 2.4 above the normal; maximum, 88, at Vineland, 28th; minimum, 10, at Charlotteburg, 3d; greatest monthly range, 67, at Vineland; least monthly range, 42, at Atlantic City.

Precipitation.—The average was 0.28 below the normal; greatest monthly, 4.86, at Hightstown; least monthly, 1.71, at Atlantic City.

Wind.—Prevailing direction, northwest.—*E. W. McGann, Observer, Weather Bureau, New Brunswick, director.*

NEW MEXICO.

Temperature.—Maximum, 92, at Rincon, 25th; minimum, 10, at Chama, 28th; greatest monthly range, 68, at Chama; least monthly range, 45, at Galisteo.

Precipitation.—Greatest monthly, 1.48, at Santa Fe; least monthly, 0.00, at several stations.

Wind.—Prevailing direction, west.—*H. B. Hersey, Observer, Weather Bureau, Santa Fe, director.*

NEW YORK.

Temperature.—The mean was 1.3 above the normal; maximum, 83, at Rome, 30th; minimum, 7, at Number Four, 3d; greatest monthly range, 68, at Rome; least monthly range, 42, at Willets Point.

Precipitation.—The average was 0.17 above the normal; greatest monthly, 8.09, at Alfred Center; least monthly, 0.65, at West Chazy.

Wind.—Prevailing direction, northwest.—*Prof. E. A. Fuytes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Observer, Weather Bureau, assistant.*

NORTH CAROLINA.

Temperature.—The mean was 0.4 below the normal; maximum, 89, at Washington, 28th; minimum, 22, at Bakersville, 7th; greatest monthly range, 62, at Saxon; least monthly range, 32, at Hatteras.

Precipitation.—The average was 2.09 below the normal; greatest monthly, 3.13, at Bryson City; least monthly, 0.65, at Sloan.

Wind.—Prevailing direction, southwest.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.*

NORTH DAKOTA.

Temperature.—The mean was 2.8 above the normal; maximum, 92, at Portal, 28th; minimum, 5, at Woodbridge, 1st; greatest monthly range, 77, at Williamsport; least monthly range, 38, at Churchs Ferry.

Precipitation.—The average was 1.38 above the normal; greatest monthly, 7.48, at Forman; least monthly, 1.94, at McKinney.

Wind.—Prevailing direction, southeast.—*B. H. Bronson, Observer, Weather Bureau, Bismarck, director.*

OHIO WEATHER AND CROP SERVICE.

Temperature.—The mean was 0.6 above the normal; maximum, 97, at Portsmouth, 30th; minimum, 16, at Garrettsville, Green Hill, and Orangeville, 3d; greatest monthly range, 69, at Benton Ridge; least monthly range, 50, at Millport and New Paris.

Precipitation.—The average was 0.71 below the normal; greatest monthly, 4.71, at New Alexandria; least monthly, 1.26, at Fostoria and Vickery.

Wind.—Prevailing direction, southwest.—*L. N. Bonham, Columbus, director; C. M. Strong, Observer, Weather Bureau, assistant.*

OKLAHOMA.

Temperature.—The mean was 2.1 above the normal; maximum, 97, at Mangum, 23d; minimum, 28, at Fort Supply, 3d, and at Pond Creek, 10th; greatest monthly range, 64, at Fort Supply; least monthly range, 33, at Anadarko.

Precipitation.—The average was 1.34 above the normal; greatest monthly, 7.92, at Eufaula; least monthly, 2.45, at Anadarko.

Wind.—Prevailing direction, south.—*J. I. Widmeyer, Observer, Weather Bureau, Oklahoma City, director.*

OREGON.

Temperature.—The mean was 1.6 above the normal; maximum, 85, at Grants Pass, 19th; minimum, 8, at Burns, 17th; greatest monthly range, 63, at Fife; least monthly range, 24, at Salem (b).

Precipitation.—The average was 0.85 below the normal; greatest monthly, 9.73, at Glenora; least monthly, trace, at Klamath Falls.

Wind.—Prevailing direction, southwest.—*Hon. H. E. Hayes, Master State Grange, Portland, director; S. M. Blanford, Observer, Weather Bureau, assistant.*

PENNSYLVANIA.

Temperature.—The mean was normal; maximum, 83, at Kilmer, 27th; minimum, 5, at Drifton, 5th; greatest monthly range, 69, at Dyberry; least monthly range, 49, at Harrisburg.

Precipitation.—The average was 0.34 above the normal; greatest monthly, 10.00, at Somerset; least monthly, 1.69, at Altoona.

Wind.—Prevailing direction, northwest.—*Under direction of the Franklin Institute, Philadelphia: W. P. Tatham, director; T. F. Townsend, Local Forecast Official, Weather Bureau, assistant.*

RHODE ISLAND.

Temperature.—The mean was 0.6 above the normal; maximum, 78, at Pawtucket, 27th; minimum, 18, at Kingston, 2d; greatest monthly range, 57, at Providence (a); least monthly range, 38, at Block Island.

Precipitation.—The average was 0.36 above the normal; greatest monthly, 4.30, at Bristol; least monthly, 3.31, at Pawtucket.—*J. Warren Smith, Weather Bureau, Boston, Mass., director.*

SOUTH CAROLINA.

Temperature.—Maximum, 95, at Simpsonville, 29th; minimum, 30, at Hollands Store, 13th, and at Yorkville, 3d; greatest monthly range, 60, at Simpsonville; least monthly range, 38, at Port Royal.

Precipitation.—The average was 1.22 below the normal; greatest monthly, 6.05, at Cheraw; least monthly, 0.53, at Charleston.

Wind.—Prevailing direction, southwest.—*J. W. Bauer, Observer, Weather Bureau, Columbia, director.*

SOUTH DAKOTA.

Temperature.—The mean was 4.1 above the normal; maximum, 99, at Tyndall, 28th; minimum, 7, at Brookings, 1st; greatest monthly range, 78, at Tyndall; least monthly range, 44, at Gale.

Precipitation.—The average was 1.10 above the normal; greatest monthly, 7.29, at Webster; least monthly, 1.55, at Fort Sully.

Wind.—Prevailing direction, northwest.—*S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.*

TENNESSEE WEATHER AND CROP SERVICE.

Temperature.—The mean was 0.2 below the normal; maximum, 92, at Hohenwald, 29th; minimum, 26, at Bristol, 12th; greatest monthly range, 64, at Hohenwald; least monthly range, 41, at Savannah.

Precipitation.—The average was 0.35 below the normal; greatest monthly, 8.45, at Memphis; least monthly, 1.48, at Strawberry Plains.

Wind.—Prevailing direction, south.—*J. B. Marbury, Local Forecast Official, Weather Bureau, Nashville, director.*

TEXAS.

Temperature.—The mean was 3.2 above the normal; maximum, 104, at Fort Ringgold and Camp Eagle Pass, 25th; minimum, 22, at Hartley, 4th and 15th; greatest monthly range, 70, at Fort Hancock; least monthly range, 22, at Galveston.

Precipitation.—The average was 1.13 above the normal; greatest monthly, 10.34, at Fredericksburg; least monthly, trace, at Columbia and Hale Center.

Wind.—Prevailing direction, south.—*D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.*

UTAH.

Temperature.—Maximum, 91, at Saint George, 10th; minimum, 4, at Silver Lake, 8th; greatest monthly range, 69, at Fillmore; least monthly range, 46, at Logan.

Precipitation.—Greatest monthly, 3.00, at Silver Lake; least monthly, trace, at Fort Du Chesne and Losee.

Wind.—Prevailing direction, northwest.—*G. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.*

VERMONT.

Temperature.—The mean was 3.9 above the normal; maximum, 78, at Enosburg Falls, 20th, and at Woodstock, 27th; minimum, 5, at Simonsville, 3d; greatest monthly range, 66, at Enosburg Falls and Woodstock; least monthly range, 52, at Burlington.

Precipitation.—The average was 0.79 below the normal; greatest monthly, 2.66, at Jacksonville; least monthly, 0.86, at Burlington.

Wind.—Prevailing direction, north.—*J. Warren Smith, Weather Bureau, Boston, Mass., director.*

VIRGINIA.

Temperature.—Maximum, 92, at Richmond, 28th; minimum, 19, at Dale Enterprise and Hot Springs, 3d; greatest monthly range, 69, at Avon; least monthly range, 43, at Cape Charles and Cape Henry.

Precipitation.—Greatest monthly, 4.20, at Birdsnest; least monthly, 0.75, at Christiansburg.

Wind.—Prevailing direction, northwest.—*Dr. E. A. Craighill, Lynchburg, director; J. N. Ryker, Observer, Weather Bureau, assistant.*

WASHINGTON.

Temperature.—The mean was 3.3 below the normal; maximum, 87, at Connell, 20th; minimum, 20, at Hunters, 16th, at Wenatchee Lake, 3d, and at Waterville, 15th; greatest monthly range, 65, at Connell; least monthly range, 22, at Tatoosh Island.

Precipitation.—The average was 1.42 above the normal; greatest monthly, 15.57, at Neah Bay; least monthly, 0.14, at Bridgeport.

Wind.—Prevailing direction, southwest.—*H. F. Alciatore, Observer, Weather Bureau, Seattle, director.*

WEST VIRGINIA.

Temperature.—Maximum, 90, at Spencer, 18th and 19th; minimum, 14, at Pleasant Hill, 3d; greatest monthly range, 64, at Pleasant Hill, Burlington, Grafton, and Marlinton; least monthly range, 51, at Monarch.

Precipitation.—Greatest monthly, 5.30, at Beverly; least monthly, 1.97, at Hinton.

Wind.—Prevailing direction, west.—*H. W. Richardson, Observer, Weather Bureau, Parkersburg, director.*

WISCONSIN.

Temperature.—The mean was 3.0 above the normal; maximum, 89, at Black River Falls, 26th; minimum, 6, at Florence, 2d; greatest monthly range, 72, at Black River Falls; least monthly range, 40, at Milwaukee.

Precipitation.—The average was 1.00 above the normal; greatest monthly, 6.61, at Cadiz; least monthly, 1.41, at Meadow Valley.

Wind.—Prevailing direction, southeast.—*W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.*

WYOMING.

Temperature.—The mean was 5.0 above the normal; maximum, 81, at Sheridan, 21st; minimum, 6, at Camp Pilot Butte, 3d; greatest monthly range, 68, at Camp Pilot Butte; least monthly range, 44, at Lander.

Precipitation.—The average was 0.47 below the normal; greatest monthly, 2.88, at Lusk; least monthly, 0.29, at La Barge.

Wind.—Prevailing direction, northwest.—*E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.*

INLAND NAVIGATION.

STAGE OF WATER IN RIVERS.

The following table shows the danger point at each river station; the highest and lowest stages for the month of April, 1894, with the dates of occurrence, and the monthly range:

Heights of rivers above low-water mark, April, 1894.

Stations.	Danger-point on gauge.	Highest water.		Lowest water.		Monthly range.
		Height.	Date.	Height.	Date.	
<i>Red River.</i>	<i>Feet.</i>	<i>Feet.</i>		<i>Feet.</i>		<i>Feet.</i>
Shreveport, La.	29.2	34.5	2	17.8	29	16.7
<i>Arkansas River.</i>						
Fort Smith, Ark.	22.0	11.7	21, 26, 27	2.4	8	9.3
Little Rock, Ark.	23.0	14.1	28	7.1	10	7.0
<i>Missouri River.</i>						
Pierre, S. Dak.	13.0	.....	.....	.....	.....	.....
Sioux City, Iowa.	18.7	16.0	13	8.4	3	7.6
Omaha, Neb.	18.0	15.1	14	6.7	1	8.4
Kansas City, Mo.	21.0	18.5	16	6.8	1	11.7
<i>Mississippi River.</i>						
St. Paul, Minn.	14.0	10.6	25	2.9	4, 7-9	7.7
La Crosse, Wis.	10.0	11.0	28	5.1	8	5.9
Dubuque, Iowa.	16.0	11.4	30	8.0	11-13	5.4
Davenport, Iowa.	15.0	7.0	30	4.6	13-19	2.4
Keokuk, Iowa.	14.0	6.5	6	4.4	16, 20	2.1
Hannibal, Mo.	17.0	7.0	6, 8	5.4	20, 21	1.6
St. Louis, Mo.	30.0	18.7	20	9.8	7	8.9
Cairo, Ill.	40.0	30.8	21	21.5	30	9.3
Memphis, Tenn.	33.0	23.9	24	17.7	30	6.2
Vicksburg, Miss.	41.0	40.9	2	34.5	21	6.4
New Orleans, La.	13.0	14.6	6	13.1	24-26	1.5
<i>Ohio River.</i>						
Parkersburg, W. Va.	38.0	16.1	14	8.0	6, 8	8.1
Cincinnati, Ohio.	45.0	25.3	15, 16	14.2	9, 10	11.1
Louisville, Ky.	24.0	10.0	16	6.9	8	3.1

Heights of rivers—Continued.

Stations.	Danger-point on gauge.	Highest water.		Lowest water.		Monthly range.
		Height.	Date.	Height.	Date.	
<i>Cumberland River.</i>	<i>Feet.</i>	<i>Feet.</i>		<i>Feet.</i>		<i>Feet.</i>
Nashville, Tenn.	40.0	23.0	14, 15	5.9	30	17.1
<i>Tennessee River.</i>						
Chatanooga, Tenn.	33.0	8.5	13	4.0	29, 30	4.5
Knoxville, Tenn.	29.0	.....	.....	.....	.....	.....
<i>Monongahela River.</i>						
Pittsburg, Pa.	22.0	12.2	12	4.2	6, 7	8.0
<i>Savannah River.</i>						
Augusta, Ga.	32.6	11.2	22	7.2	28, 29	4.0
<i>Willamette River.</i>						
Portland, Oregon.	15.0	17.8	30	11.2	21, 22, 24	6.6
<i>Susquehanna River.</i>						
Harrisburg, Pa.	17.0	10.0	25	2.8	8-11	7.2
<i>Alabama River.</i>						
Montgomery, Ala.	48.0	11.0	12	3.5	30	7.5
<i>James River.</i>						
Lynchburg, Va.	18.0	1.1	11	0.8	5, 28-30	0.3
<i>Sacramento River.</i>						
Red Bluff, Cal.	22.0	10.4	1	4.5	30	5.9
Sacramento, Cal.	25.0	22.6	12	20.2	1	2.4
<i>Des Moines River.</i>						
Des Moines, Iowa.	19.0	3.4	30	3.2	6-8, 10-17	0.2

FLOODS.

The above table shows that in the rivers here recorded the waters during April rose above the danger line at Shreveport, La., where the Red River was highest on the 2d; La Crosse, Wis., where the Mississippi was highest on the 28th; Vicksburg, Miss., where the river touched the danger line on the 2d;